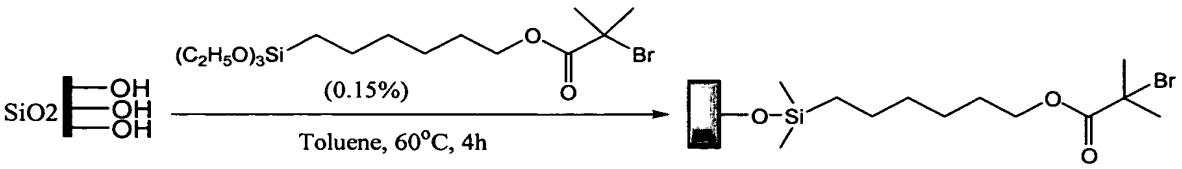

Figure 1: Initiator Molecule Self-assembled into a Monolayer on a Surface.

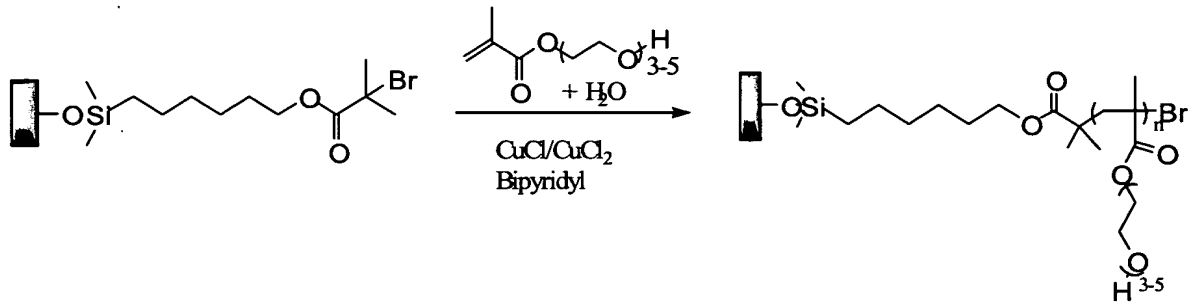

Figure 2: Growing PEGAA Films on a Substrate Using Surface Atom Transfer Radical Polymerization.

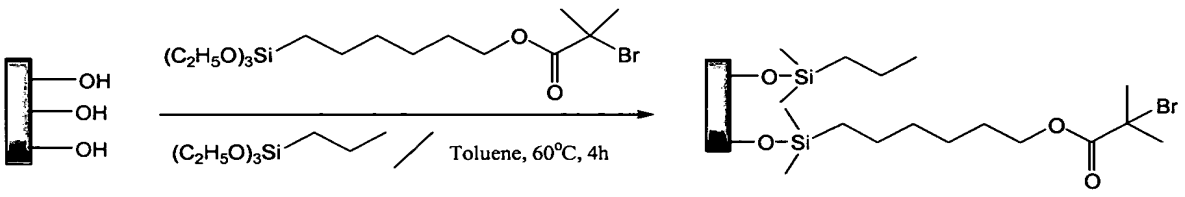

Figure 3: Self-assembly of a Monolayer Containing Initiator and Spacer Molecules onto the Surface of a Substrate.

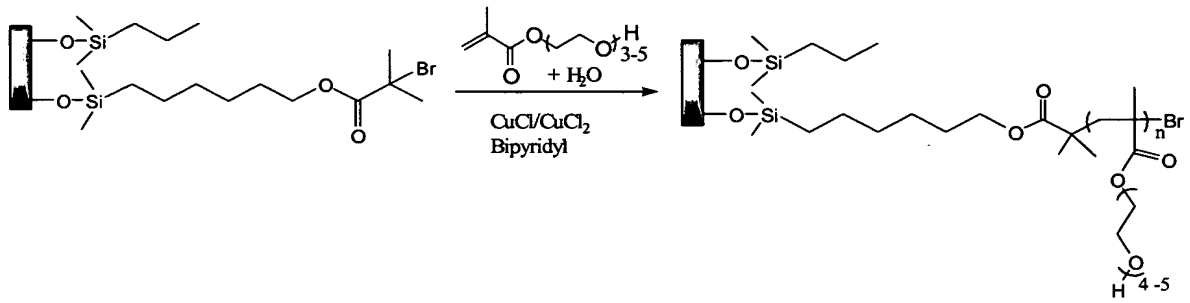

Figure 4: Bonding of PEGAA Polymer Chains to the Initiator Molecules Contained in a SAM Comprised of Both Initiator and Spacer Molecules.

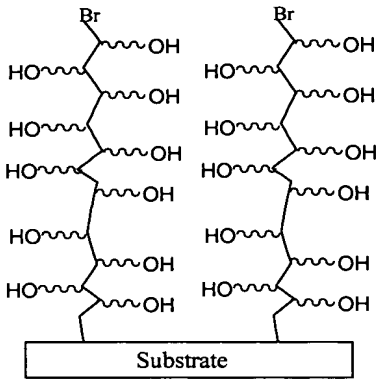

Figure 5: Cartoon Depicting Chemical Group(s) Attached to the Surface of Polymer Chains Grown on a Substrate.

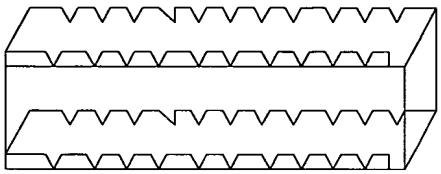

Figure 6: Schematic glass tray designed to hold 1–10 wafer pieces.

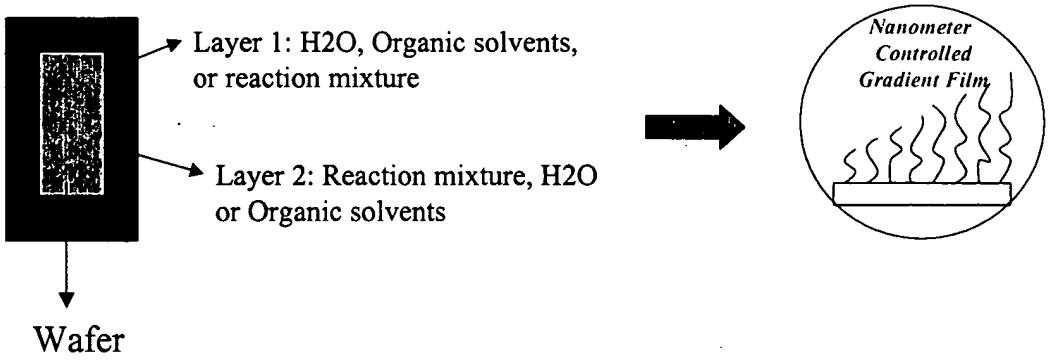

Figure 7: Using a Two-Layer System to Generate a Thin PEGAA Polymer Film Gradient.

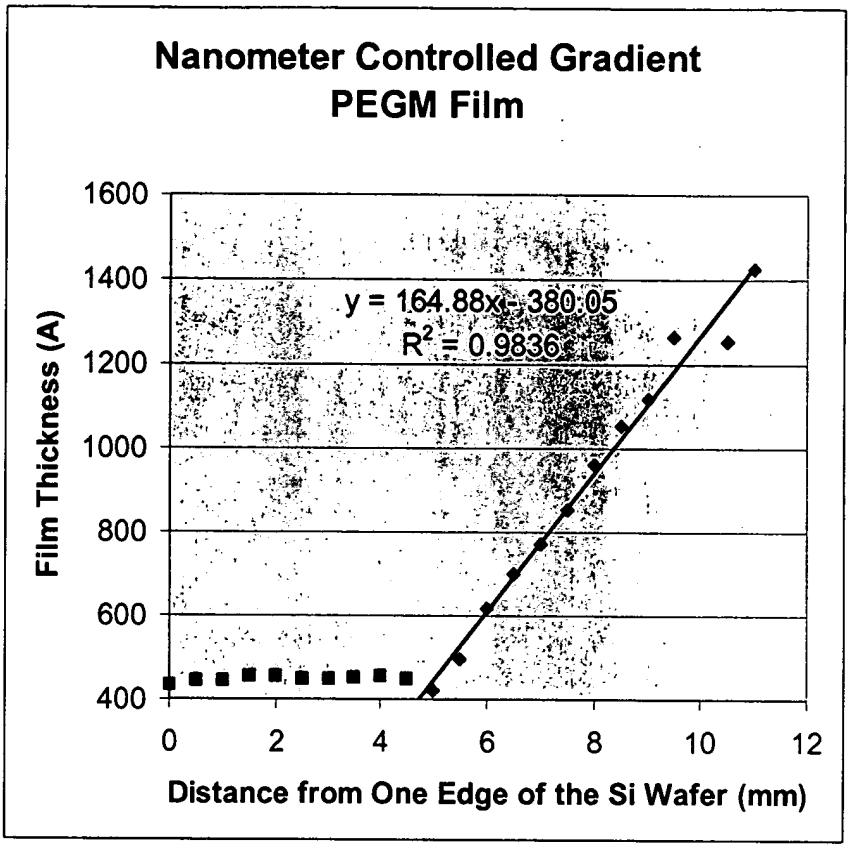

Figure 8: Chart Depicting Growth of a Thin PEGM Film Gradient.

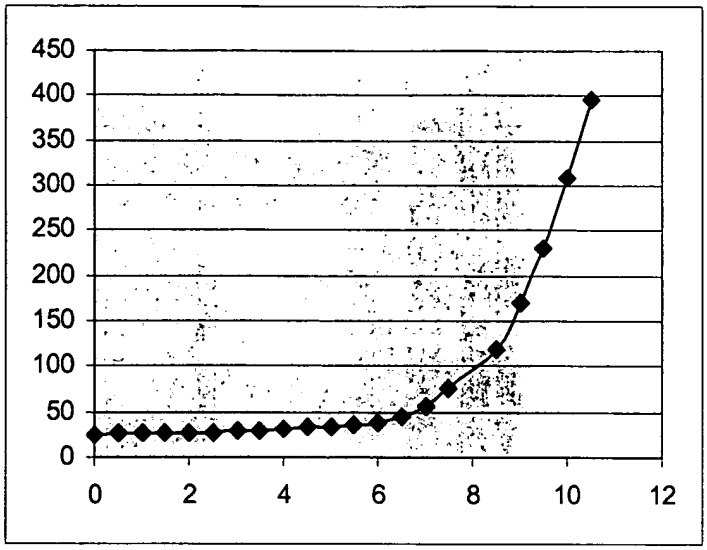

Figure 9: Chart Depicting the Growth of a Thin PEGM Film Gradient Using Bulk Polymerization.

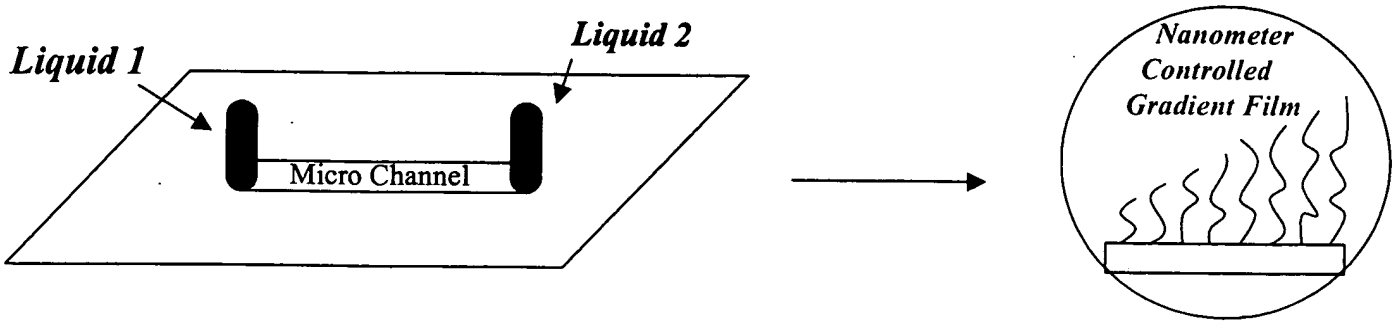

Figure 10. Schematic Depicting Alternative Method for Growing a PEGAA Film Gradient on an Initiator-Coated Substrate.